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| APPLICATION NO.  | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CKET NO. CONFIRMATION N |  |  |
|--|------------------|----------------------|---------------------|-------------------------|--|--|
| 10/720,590   | 11/24/2003       | Dennis L. Hammond    | APX-12571-DIV       | 5025                    |  |  |
| 7609   | 7590 04/27/2006  | EXAMINER             |                     |                         |  |  |
| •  | LL, PORTER & CLA | MCAVOY, ELLEN M      |                     |                         |  |  |
| 925 EUCLID AVENUE, SUITE 700<br>CLEVELAND, OH 44115-1405 |                  |                      | ART UNIT            | PAPER NUMBER            |  |  |
|  | ,                |                      | 1764                | 1764                    |  |  |
|  |                  |                      |                     |                         |  |  |

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  | Application No.   |  | Applicant(s)   |         |             |  |  |
|--|--|---|--|--|---------|-------------|--|--|
|  |  | 10/720,590  |  | HAMMOND, DENN  | NS L    |             |  |  |
| Office Action Summary                                |  | Examiner  |  | Art Unit   |         | <del></del> |  |  |
|  |  | <br>  Ellen M. McAvoy   | ,  | 1764   |         |             |  |  |
| Period fo  | The MAILING DATE of this communication app   | <u> </u>  |  | orrespondence add  | dress   |             |  |  |
|  | • •  | / 10 0ET TO EVI   | DIDE 2 MONTU   | e) OD TUIDTY (2(   | )) DAVE |             |  |  |
| WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS CO<br>36(a). In no event, howen<br>will apply and will expire<br>, cause the application to | OMMUNICATION ever, may a reply be time SIX (6) MONTHS from to become ABANDONEE | l.<br>ely filed<br>the mailing date of this co<br>D (35 U.S.C. § 133). |         |             |  |  |
| Status   |  |   |  |  |         |             |  |  |
| 1)   | Responsive to communication(s) filed on  | •   |  |  |         |             |  |  |
| 2a)  | This action is <b>FINAL</b> . 2b)⊠ This  | action is non-fina  | al.  |  |         |             |  |  |
| 3)   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |         |             |  |  |
|  | closed in accordance with the practice under E   | x parte Quayle,   | 1935 C.D. 11, 45   | 3 O.G. 213.  |         |             |  |  |
| Dispositi  | on of Claims   |   |  |  |         |             |  |  |
| 4)⊠  | Claim(s) 1-20 is/are pending in the application.   |   |  |  |         |             |  |  |
|  | 4a) Of the above claim(s) is/are withdrav  | wn from consider  | ation.   |  |         |             |  |  |
| 5)   | Claim(s) is/are allowed.   |   |  |  |         |             |  |  |
| <u> </u>   | ∑ Claim(s) <u>1-20</u> is/are rejected.  |   |  |  |         |             |  |  |
|  | Claim(s) is/are objected to.   |   |  |  |         |             |  |  |
| 8)   | Claim(s) are subject to restriction and/or   | r election require  | ment.  |  |         |             |  |  |
| Applicati  | on Papers  |   |  |  |         |             |  |  |
| 9)[  | The specification is objected to by the Examine  | r.  |  |  |         |             |  |  |
| 10)  | The drawing(s) filed on is/are: a) acce  | epted or b)□ obj  | ected to by the E  | xaminer.   |         |             |  |  |
|  | Applicant may not request that any objection to the  |   |  | • •  |         |             |  |  |
| 11)  | Replacement drawing sheet(s) including the correction is abjected to but he for  |   |  |  |         | ).          |  |  |
|  | The oath or declaration is objected to by the Ex   | aminer. Note the  | attached Office  | Action or form P10   | J-152.  |             |  |  |
| Priority u   | inder 35 U.S.C. § 119  |   |  |  |         |             |  |  |
| _  | Acknowledgment is made of a claim for foreign  | priority under 35   | U.S.C. § 119(a)-   | (d) or (f).  |         |             |  |  |
| a)[  | All b) Some * c) None of:  |   |  |  |         |             |  |  |
|  | <ul><li>1. Certified copies of the priority documents</li><li>2. Certified copies of the priority documents</li></ul>  |   |  | an Nio   |         |             |  |  |
|  | <ul><li>2.  Certified copies of the priority documents</li><li>3.  Copies of the certified copies of the priority</li></ul>  |   | • •  |  | Stage   |             |  |  |
|  | application from the International Bureau  |   |  | a in this ivational c  | nage    |             |  |  |
| * S  | ee the attached detailed Office action for a list of   |   |  | d.   |         |             |  |  |
|  |  |   |  |  |         |             |  |  |
|  |  |   |  |  |         |             |  |  |
| Attachment   | • •  |   |  |  |         |             |  |  |
| 1) 🔯 Notice  | e of References Cited (PTO-892)  |   | Interview Summary (I   | •  |         |             |  |  |
| 3) 🔯 Inforn  | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   | 5) 🔲  |  | e<br>tent Application (PTO-  | ·152)   |             |  |  |
| Paper  | No(s)/Mail Date <u>2/12/2004</u> .   | 6) [_] (  | Other:   |  |         |             |  |  |

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### Specification

The use of the trademark ACRAWAX®C has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### Claim Rejections - 35 USC § 112

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the specific solid lubricant system comprising a fatty acid, a wax and a guanidine material, does not reasonably provide enablement for any solid lubricant system being capable of forming a liquid phase upon application of pressure. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. It has been well established that there must be a reasonable correlation between the scope of the exclusive right granted to a patent applicant and the scope of enablement set forth in the patent application. *In re Fischer*, 427 F.2d 833, 839; 166 USPQ 18, 24 (CCPA 1970).

## Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection

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is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 16-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,679,935. Although the conflicting claims are not identical, they are not patentably distinct from each other because the composition comprising a mixture of a ceramic or metal powder and a solid lubricant system may be the same.

### Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schofalvi (6,093,761).

Schofalvi discloses a binder composition comprising a polycarbonate polymer, an ethylenebisamide wax and a guanidine wetting agent; and a method for forming a sintered part by powder injection molding including the steps of forming a green composition comprising the binder and an inorganic powder. The guanidine wetting agent is the reaction product of guanidine and an acid selected from a fatty acid, an organic acid, and a stronger acid. Schofalvi teaches that in one embodiment, the guanidine wetting agent is guanidine ethyl-hexanoate. See column 5, lines 21-32. Suitable organic acids include C<sub>12</sub> to C<sub>22</sub> acids including lauric acid, tridecylic acid, palmitic acid and stearic acid. See column 6, lines 34-49 of ('761). The examiner is of the position that Schofalvi meets the limitations of the solid lubricant system of claims 1-15 and meets the limitations of the composition comprising a ceramic powder and the solid lubricant composition of claims 16-20. Applicant's open-ended claim language "comprising" allows for the addition of other components to the compositions including the polycarbonate polymer of the prior art references. Although Schofalvi does not teach that the solid lubricant system is capable of forming a liquid phase upon application of pressure, Schofalvi does teach that the binder composition decomposes during the molding operation.

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And, since the compositions may be the same, the solid lubricant system of the prior art must also be capable of forming a liquid phase upon application of pressure.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over by Schofalvi et al (6,376,585).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. Schofalvi et al (6,376,585) is essentially identical to Schofalvi (6,093,761) outlined above.

Claims 1-7 and 10-15 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Balasubramaniam (6,303,547).

Balasubramaniam discloses friction modified lubricants which comprise the reaction product of at least one  $C_5$ - $C_{60}$  carboxylic acid and at least one amine selected from the group consisting of guanidine, aminoguanidine, urea, thiourea and salts thereof. Suitable carboxylic acids include the saturated aliphatic monocarboxylic acids such as valeric, caproic, caprylic, lauric, palmitic, strearic and the like. See column 5, lines 7-46. The examiner is of the position that the reaction product of guanidine and carboxylic acid meets the limitation of the solid lubricant system of the claims. The claim language "for use in the production of metal powder compacted parts" in claim 1 and "for use as a die wall lubricant" in dependent claim 5 are

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statements of intended use which carry no weight in the claims. The "for use" recitation of claim 1 has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Although Balasubramaniam does not teach that the solid lubricant system is capable of forming a liquid phase upon application of pressure, the examiner is of the position that since the compositions may be the same, the solid lubricant system of the prior art must also be capable of forming a liquid phase upon application of pressure.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references not considered on PTO-1449 were not submitted by applicant. The references were also not found in parent application 10/217,137.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ellen M McAvoy

Primary Examiner

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EMcAvoy April 25, 2006